

What is claimed is:

Sub A' 1. An information distribution system having a terminal apparatus in which a recording medium recording beforehand an identifier unique to said recording medium and prepaid information and is loadable and an information center which is connectable to said terminal apparatus and transmits content data thereto via a predetermined communication line, said terminal apparatus comprising:

first receiving means for receiving said content data transmitted from said information center;

recording and reproducing means for recording said content data received by said first receiving means onto said recording medium loaded in said terminal apparatus and reproducing said identifier unique to said recording medium and said prepaid information; and

first transmitting means for transmitting said reproduced identifier unique to said recording medium and said reproduced prepaid information to said information center;

said information center comprising:

first storage means for storing a plurality of content data;

second transmitting means for transmitting

Sub A7 predetermined content data from said first storage means to said terminal apparatus;

second receiving means for receiving said identifier unique to said recording medium and said prepaid information transmitted from said terminal apparatus;

second storage means for storing a usable remaining amount of money in accordance with said identifier unique to said recording medium and said prepaid information received by said second receiving means; and

charging processing means for updating, when said predetermined content data are transmitted from said first storage means to said terminal apparatus, said usable remaining amount of money stored in said second storage means for a charge of said predetermined content data transmitted from said first storage means to said terminal apparatus.

2. An information distribution system according to claim 1, wherein said recording medium also records information about a remaining recordable capacity thereof, said information is reproduced by said recording and reproducing means, and said reproduced information is transmitted by said first transmitting means to said information center.

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3. An information distribution system according to claim 2, wherein said information center further comprising:

first comparing means for comparing said usable remaining amount of money stored in said second storage means with a price of content data to be transmitted to said terminal apparatus; and

second comparing means for comparing said information about a remaining recordable capacity of said recording medium with a size of said content data to be transmitted to said terminal apparatus.

4. An information distribution system according to claim 3, wherein, if said usable remaining amount of money is found by said first comparing means to be smaller than said price of said content data to be transmitted to said terminal apparatus, a control signal is transmitted from said information center to said terminal apparatus to instruct said terminal apparatus to prompt for the loading of a second recording medium recording beforehand an identifier unique thereto and prepaid information into said terminal apparatus.

5. An information distribution system according to claim 4, wherein, said information center further comprising adding means for adding, when said second

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recording medium has been loaded in response to the prompt for the loading of said second recording medium, a usable remaining amount of money in said second recording medium to said usable remaining amount of money in the previously loaded recording medium.

6. An information distribution system according to claim 5, wherein, if, after loading of said second recording medium into said terminal apparatus in response to the prompt for the loading of said second recording medium, a result of said addition by said adding means is found in excess of said price of said content data to be transmitted, said identifier unique to said recording medium and said prepaid information stored in said second storage means are edited on the basis of said information about the remaining recordable capacity of said previously loaded recording medium and said information about the remaining recordable capacity of said second recording medium.

7. An information distribution system according to claim 3, wherein, if said remaining recordable capacity is found by said second comparing means to be smaller than said size of content data to be transmitted to said terminal apparatus, a control signal is transmitted from said information center to said terminal apparatus to

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instruct said terminal apparatus to prompt for the loading of a second recording medium recording an identifier unique to said second recording medium and said prepaid information into said terminal apparatus.

8. An information distribution system according to claim 7, wherein, said information center further comprising adding means for adding, when said second recording medium has been loaded in response to the prompt for the loading of said second recording medium, a usable remaining amount of money in said second recording medium to said usable remaining amount of money in the previously loaded recording medium.

9. An information distribution system according to claim 7, wherein, when said second recording medium has been loaded in said terminal apparatus in response to the prompt for the loading of said second recording medium, the remaining recordable capacity of said second recording medium is compared with the size of said content data to be transmitted to said terminal apparatus.

10. An information distribution system according to claim 7, wherein, when said second recording medium has been loaded in said terminal apparatus in response to the prompt for the loading of said second recording medium and said content data have been recorded to said

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second recording medium, contents recorded on said second storage means are updated to said identifier unique to said second recording medium, said prepaid information, and said usable remaining amount of money of said second recording medium.

11. An information distribution system according to claim 1, wherein said identifier unique to said recording medium and said prepaid information are recorded on said recording medium in an unrewritable manner.

12. An information distribution system according to claim 1, wherein communication destination identifying information for connecting said terminal apparatus to said information center is also recorded on said recording medium.

13. A terminal apparatus comprising:

loading means capable of loading a recording medium recording beforehand a identifier unique to said recording medium and prepaid information into said terminal apparatus;

reproducing means for reproducing said identifier unique to said recording medium and said prepaid information from said recording medium loaded in said loading means;

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(for connecting said terminal apparatus to said information center is also recorded on said recording medium.

16. A terminal apparatus according to claim 13, wherein information about a remaining recordable capacity is recorded on said recording medium and said information is transmitted to said information center via said transmitting means.

17. An information center, connected to a terminal apparatus via a predetermined communication line, for distributing content data, comprising:

first storage means for storing a plurality of content data;

transmitting means for transmitting predetermined content data from said first storage means to said terminal apparatus;

receiving means for receiving an identifier unique to a recording medium and prepaid information stored therein transmitted from said terminal apparatus;

second storage means for storing a usable remaining amount of money in accordance with said identifier unique to said recording medium and said prepaid information received by said receiving means; and

charging processing means for updating, when said

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predetermined content data are transmitted from said first storage means to said terminal apparatus, said usable remaining amount of money stored in said second storage means for a charge of said predetermined content data transmitted from said first storage means to said terminal apparatus.

18. An information center according to claim 17, further comprising:

first comparing means for comparing said usable remaining amount of money stored in said second storage means with a price of content data to be transmitted to said terminal apparatus; and

second comparing means for comparing said information about a remaining recordable capacity of said recording medium with a size of said content data to be transmitted to said terminal apparatus.

19. An information center according to claim 18, wherein, if said usable remaining amount of money is found by said first comparing means to be smaller than said price of said content data to be transmitted, a control signal is transmitted from said information center to said terminal apparatus to instruct said terminal apparatus to prompt for the loading of a second recording medium recording beforehand an identifier

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unique thereto and prepaid information into said terminal apparatus.

20. An information center according to claim 19, further comprising adding means for adding, when said second recording medium has been loaded in response to the prompt for the loading of said second recording medium, a usable remaining amount of money in said second recording medium to said usable remaining amount of money in the previously loaded recording medium.

21. An information center according to claim 20, wherein, if, after loading of said second recording medium into said terminal apparatus in response to the prompt of the loading of said second recording medium, a result of said addition by said adding means is found in excess of said price of said content data to be transmitted, said identifier unique to said recording medium and said prepaid information stored in said second storage means are edited on the basis of said information about the remaining recordable capacity of said previously loaded recording medium and said information about the remaining recordable capacity of said second recording medium.

22. An information center according to claim 17, wherein, if said remaining recordable capacity is found

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1. The first step is to identify the problem. This involves understanding the symptoms and the context in which they are occurring.

23. An information center according to claim 22, further comprising adding means for adding, when said second recording medium has been loaded in response to the prompt for the loading of said second recording medium, a usable remaining amount of money in said second recording medium to said usable remaining amount of money in the previously loaded recording medium.

25. An information center according to claim 22, wherein, when said second recording medium has been loaded in said terminal apparatus in response to the

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prompt for the loading of said second recording medium and said content data have been recorded on said second recording medium, contents stored on said second storage means are updated to said identifier unique to said second recording medium, said prepaid information, and said usable remaining amount of money of said second recording medium.

26. An information center according to claim 17, wherein said identifier unique to said recording medium and said prepaid information are recorded on said recording medium in an unrewritable manner.

27. An information distribution system according to claim 17, wherein communication destination identifying information for connecting said terminal apparatus to said information center is also recorded on said recording medium.

28. A recording medium comprising:

an unrewritable area in which an identifier unique to said recording medium and prepaid information are recorded beforehand;

a recording area in which content data are recorded; and

a managing area in which recordable capacity of said recording area is managed.

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29. A recording medium according to claim 28, wherein communication destination identifying information for connecting to an information center is also recorded on said recording medium.

30. An information distribution method for distributing content data from an information center to a terminal apparatus in which a recording medium is loadable and recording the distributed content data thereto, said information center and said terminal apparatus being interconnected via a predetermined communication line, comprising the steps of:

receiving an identifier unique to said recording medium and prepaid information recorded on said recording medium beforehand, transmitted from said terminal apparatus;

storing, in a memory, a usable remaining amount of money in accordance with said received identifier unique to said recording medium and said received prepaid information;

comparing said usable remaining amount of money stored in said memory with a charge of content data to be distributed from said information center to said terminal apparatus;

permitting, if said usable remaining amount of

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money stored in said memory is greater than said charge of said content data to be distributed from said information center to said terminal apparatus, the transmission of said content data from said information center to said terminal apparatus; and

updating, by said charge of said content data, said usable remaining amount of money stored in a second memory when said content data are transmitted from said information center to said terminal apparatus.

31. An information distribution method according to claim 30, further comprising the steps of:

comparing said usable remaining amount of money stored in said memory with said charge of said content data to be transmitted to said terminal apparatus; and

comparing a recordable remaining capacity of said recording medium transmitted from said terminal apparatus with a size of said content data to be transmitted to said terminal apparatus.

32. An information distribution method according to claim 30, wherein, if said usable remaining amount of money is found in the first comparing step to be smaller than said price of said content data to be transmitted, a control signal is transmitted from said information center to said terminal apparatus to instruct said

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terminal apparatus to prompt for the loading of a second recording medium recording beforehand an identifier unique to said second recording medium and prepaid information.

33. An information distribution method according to claim 32, further comprising the step of:

adding, when said second recording medium has been loaded in response to the prompt for the loading of said second recording medium, a usable remaining amount of money in said second recording medium to said usable remaining amount of money in the previously loaded recording medium.

34. An information distribution method according to claim 33 further comprising the step of: if, after loading of said second recording medium into said terminal apparatus in response to the prompt for the loading of said second recording medium, a result of said addition in said adding step is found in excess of said price of said content data, editing said identifier unique to said recording medium and said prepaid information stored in said second memory on the basis of said information about the remaining recordable capacity of said previously loaded recording medium and said information about the remaining recordable capacity of

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1 said second recording medium.

35. An information distribution method according to claim 31 further comprising the step of: if said remaining recordable capacity is found in said second comparing step to be smaller than said size of said content data to be transmitted, transmitting a control signal from said information center to said terminal apparatus to instruct said terminal apparatus to prompt the loading of a second recording medium recording said identifier unique to said second recording medium and said prepaid information into said terminal apparatus.

36. An information distribution method according to claim 35, further comprising the step of adding, when said second recording medium has been loaded in response to the prompt for the loading of said second recording medium, a usable remaining amount of money in said second recording medium to said usable remaining amount of money in the previously loaded recording medium.

37. An information distribution method according to claim 35, further comprising the step of: when said second recording medium has been loaded in said terminal apparatus in response to said prompt for the loading of said second recording medium, comparing said recordable remaining capacity of said second recording medium with

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the size of said content data to be transmitted to said terminal apparatus.

38. An information distribution method according to claim 35, further comprising the step of: when said second recording medium has been loaded in said terminal apparatus in response to the prompt for the loading of said second recording medium and said content data have been recorded to said second recording medium, updating contents recorded on said second memory to said identifier, said prepaid information, and said usable remaining amount of money of said second recording medium.

39. An information distribution method according to claim 30, wherein said identifier unique to said recording medium and said prepaid information are recorded on said recording medium in an unrewritable manner.

40. An information distribution method according to claim 30, wherein communication destination identifying information for connecting said terminal apparatus to said information center is also recorded on said recording medium.